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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,422	09/04/2003	Niraj Vasishtha	113631	7624

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OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER	
RAZA, SAIRA B	
ART UNIT	**PAPER NUMBER**
1711	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/654,422	VASISHTHA ET AL.	
	Examiner	Art Unit	
	Saira Raza	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 7,9,10 and 12-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 7,9,10 and 12-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 36.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The rejections have been altered to reflect the amended claims.

Election/Restrictions

2. Applicant's arguments regarding the restriction requirement are noted. The restriction requirement was made FINAL in the previous office action for the reasons set forth previously. If applicant disagrees the finality of the restriction requirement, applicant is welcome to petition.

Information Disclosure Statement

3. The German language reference is only considered to the extent of the statement of relevancy, as per the PCT Written Opinion.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 7, 9, 10, 12-15, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Munteanu et al. (US Patent No. 4,428,869). (Col. 6, Lines 38-47; Col. 7, Line 40 to Col. 8, Line 64; Col. 15, Line 55 to Col. 17, Line 17; Col. 18, Lines 31-44; Claim 1; Example IV; Example Letters I. and J).

6. In reference to claim 7, Munteanu discloses a composition of matter in the shape of a microcapsule comprising of a core component physically entrapped (i.e. encapsulated) in solid particles (polymeric material), which are further entrapped in a suspending agent (structuring agent); wherein the shell component is considered to be the solid particles covered in the suspending agent.

7. Munteanu discloses various core components such as fragrance oil, which is oxygen sensitive due to ease of oxidation.

8. As mentioned above, the shell component comprises the solid particles (polymeric material) and the suspending agent (structuring agent), wherein an example of the polymeric material is gelatin and an example of the structuring agent is clay. Munteanu discloses that physical forces hold the encapsulated core material, the suspending agent and the unconfined fragrance oil together. It is inherent that the polymeric material comprises pendant ionic groups that form an ionic bridge with the structuring agent, as evidenced by applicant disclosure in paragraphs 18, 21, 51 and the examples. Applicant discloses that gelatin can be employed in the invention as the polymeric material comprising pendant ionic groups, and that clay can be employed in the invention as an ionic structuring agent which decreases oxygen and/or water permeation though the encapsulating material, wherein the encapsulating material forms an ionic bridge with the structuring agent.

9. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, since the prior art teaches the identical chemical structures, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). The burden shifts to the applicant to show an unobvious difference. "[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on 'inherency' under 35 U.S.C. 102, on '*prima facie* obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. *In re Fitzgerald,* 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting *In re Best,* 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

10. In reference to claims 9, Munteanu discloses various core components such as fragrance oil.

11. In reference to claim 10, Munteanu discloses various polymer materials, comprising the solid particles, such as gelatin.

12. In reference to claims 12, the reference discloses various suspending agents such as clay.

13. In reference to claims 13 and 14, Munteanu discloses the inclusion of various additives into the shell component of the microcapsule such as Butylated hydroxytolune (BHT), an antioxidant, which decreases oxygen or water permeability.

14. In reference to claim 15, Munteanu discloses that once the microcapsules are prepared the result is a dry, free-flowing powder.

15. In reference to claim 17, the suspending agent, starch, functions as the entrapment agent forming an interior shell around the core component and the polymer material, cellulose, forms an exterior shell around the interior shell. It is inherent that the polymeric material comprises pendant ionic groups that form an ionic bridge with the structuring agent, as evidenced by applicant disclosure in paragraphs 18, 21, 51 and the examples. Applicant discloses that cellulose can be employed in the invention as the polymeric material comprising pendant ionic groups, and that starch can be employed in the invention as an ionic structuring agent, wherein the encapsulating material forms an ionic bridge with the structuring agent. Additionally, see ¶ 9 above.

16. In reference to claim 19, in Example I, Munteanu discloses the creation of a microcapsule where a core fragrance is encapsulated in a shell, and the shell comprises a polymer material coated by a structuring agent. Wherein the structuring agent comprises a second fragrance. Upon usage, the second fragrance is initially detected, followed by detection of the core fragrance. Hence, it is clear that the polymer material forms an interior shell around the core component and the structuring agent forms an exterior shell around the interior shell, and that the fragrance oil was protected from oxidation hence retained its desired activity. Note, that although in Example I Munteanu does not

expressly disclose the usage of a polymeric material comprising a pendant ionic group which forms an ionic bridge with the structuring agent, Munteanu envisages utilization of a polymeric material comprising a pendant ionic group which forms an ionic bridge with the structuring agent.

Claim Rejections - 35 USC § 103

17. Claims 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munteanu as applied to the claims above.

18. Munteanu discloses that the core material is encapsulated in the polymeric material via a variety of methods, such as suspension polymerization, emulsion polymerization, coacervation, or via a cellular matrix (Col. 14, Lines 58-62). For example, during the coacervation process cited by Munteanu, the core component is dispersed and encapsulated within a continuous phase of the polymeric material; hence the microcapsule is in the form of a membrane. However, Munteanu does not disclose the presence of the structuring agent in the continuous phase or that the resulting microcapsule shell comprises a dispersion of the structuring agent in the polymeric material. It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the structuring agent in the polymeric continuous phase during the formation of the microcapsules, in order to include an agent that, as disclosed above, is capable of decreasing the oxygen and/or water permeability of the polymeric material, and assists in preservation of the core component. Inclusion of the structuring agent in the polymeric continuous phase would result in formation of the microcapsule of claim 7 via coacervation, and would result in the formation of a microcapsule shell comprising a dispersion of the structuring agent in the polymeric material, as per claim 18.

Response to Arguments

19. The 112-§2 rejection of claim 13 has been withdrawn in view of the amendment.

20. Applicant's arguments filed January 12, 2005 have been fully considered but they are not persuasive. The applicants argue that Munteanu "fails to teach that the microcapsule shell should be formed from (1) a polymer material and (2) a structuring agent, where the polymer material comprises pendant ionic coups that form an ionic bridge with the structuring agent."

21. As mentioned above, Munteanu microcapsule comprising a core component encapsulated in a polymeric material, which is further encapsulated in a suspending agent (structuring agent); wherein the shell is considered to be the polymeric material covered in the suspending agent. See ¶ 8-9 above. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, since the prior art teaches the identical chemical structures, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). The burden shifts to the applicant to show an unobvious difference. Note, that because the reference does not expressly teach or address the properties of the claimed invention, does not mean that the properties are not inherently disclosed. Disclosure of the same compound(s) inherently discloses the corresponding properties. The reference cannot possibly teach or address all of the properties, but implicitly all of the properties are present.

22. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the ionic bridges provide the required decrease in oxygen or water permeability) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saira Raza whose telephone number is (571) 272-3553. The examiner can normally be reached on Monday-Friday from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system,

see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700